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Effect of extensive educational resources in farmer's conception change for rapeseed cultivation

Mehdi Azizi, Ali Akbar Moayedi

SPII Dept., Khorasan Razavi Agriculture & Natural Resources Research Center, Mashhad, Iran

Abstract

The viewpoint of rapeseed farmers in Khorasan Razavi province, in Iran, has a distinct correlation with their level of educational and technical knowledge that they are obtained from extensional resources. The farmers who studied technical leaflets, and were active in extensional programs and used the aural and ocular programs, had a very good level of satisfaction from rapeseed cultivation and expanding its area under production. This research is confirmed; having a positive viewpoint to an agricultural problem is prerequisite for accepting innovations, regardless farmer's literacy or age level.

Keywords:Farmer's viewpoint, Technical knowledge, Professional skills, Survey research

1. Introduction

One of the important worries of farmers is the competitiveness and selecting cropping priority amongst major field crops in each region. Justification of manpower potentials with relative advantages of arable crops and planting pattern conducted based on variations in climatic conditions of a selected area, are the key points for achieving success of any countries agricultural policies. Concerning to the manpower we must notice to the main effective factors can be change farmer's viewpoint about developing a specific crop in a distinct region (Abbott and Thompson, 1987). Because of this viewpoint has a very dominant effect for success or failure of any agricultural programs (Yazdani, 2007; Tobey and Chomo, 1994) Sedighi (2001) after evaluation of professional characteristics of farmers and related variants, showed that factors as banking facilities, and extension and educational activities had a obvious role in generating of positive standpoints for rapeseed farmers in Hamedan Province, Iran. So that even low literacy farmers, had been showed a propensity for achieving professional skills. He concluded, there is a significant and positive relationship between farmer's technical knowledge and their viewpoints. Azizi (2006) showed , beside of the effective role of economic aspects for entering rapeseed to crop rotation program, only the farmers were more successful in rapeseed production who had been obtained 4-5 ton/ha wheat grain yield in their farms. This emphasize on the role of farmer's experience and perception about agricultural activities.

In some cases, in spite of proselyte of agricultural extension agents and providing agronomic services, 48% of farmers who had two years experience for sowing rapeseed, showed un-satisfaction for entering the rapeseed into the planting pattern in next year.

Although the average rapeseed grain yield is low in Iran, it seems that we can promote the farmer's interest and profitability against developing of this oilseed crop using all of management and educational approaches.

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2. Methodology

Khorasan Razavi province in Iran was considered to perform this experiment. Farms and Farmers underlying this research were distributed in a area about 3500 hectare. The method of study was "survey research" with 300 rapeseed farmers sampling community. This research was done on 2009-2010. We used questionnaire for collecting data. The questionnaire was included questions about farmer's professional skills including farmer's age, level of literacy, area under cultivation of the rapeseed, seed yield and their relationship with extension resources. Also a special part was considered for entry the standpoints of farmers about the problems of rapeseed cultivation and husbandry. In the section of farmer's relationship with extensional resources seven items were took into account:

- Study of extension leaflets
- Contribution in extensional activities
- To impart from auditory educational programs, e.g. Radio
- To impart from visual educational programs, e.g. Television
- Pilot farms visit
- Direct presence of extension agents in the farms
- Farmers referral to production cooperatives

Common biometric methods was applied for data analysis, Among them: determination of relative frequency, cumulative frequency distribution, Pearson's normal distribution and correlation analysis (Sanders, 1990).

3. Findings

3.1. Professional Skills of Rapeseed Farmers

The mean age of farmers in the statistical community, was estimated about 45.3 years and their literacy level in elementary score. Rapeseed farmers had been allocated almost 4.6 hectares of their arable lands to this crop on average, at the year of our study, and their harvested yield were in the range of 0.3 – 3 ton per hectare with average of 1.573 ton/ha. The *Table 1* indicates professional skills of rapeseed farmers.

Table 1. Professional characteristics of rapeseed farmers in selected areas

Variables	Average	Standard Error	Minimum	Maximum
Age(Years)	45.3	8.16	26	65
Literacy Level (Years)	4.33	3.3	0	16
Field Area Under Cultivation (hectare)	4.68	3.5	1	17
Harvested Seed Yield (ton/ha)	1.573	0.79	0.3	3

3.2. Contribution of farmers in extensional activities

Results have shown in Table 2. The relationship with extensional resources was evaluated as poor for 40 percent of farmers. For this group, only extension agents had been visited their farms. It should be noted that the farmer's partnership in educational and extensional schedules, can guarantee the success of programs and lead to reducing the farmer's technical and professional requirements, and also increasing their knowledge, satisfaction and motive creation.

Table 2. Relationship of farmers with extensional resources

Levels	Frequency	Percentage	Cumulative Percent
Poor	120	40	40
Moderate	80	26.7	66.7
Good	50	16.7	83.3
Excellent	50	16.7	100
Sum	300	100	-

3.3. Farmers Conception developing rapeseed Cultivation

Findings showed, this conception of farmers were 40% poor and moderate, 23.3% good and 36.7% excellent. So about the 50% of rapeseed farmers in the province, had a negative viewpoint to the developing of this crop cultivation and the rest were positive conception. Having a positive viewpoint to an agricultural problem is prerequisite for accepting innovations (Sedighi, 2001 & Moayedi and Azizi, 2011). *Table 3* shows the frequency of different levels of farmers' viewpoints

Table 3. Conception of farmers to expanding rapeseed cultivation

Levels of Conception	Frequency	Percentage	Cumulative Percent
Poor	60	20	20
Moderate	60	20	40
Good	70	23.3	63.3
Excellent	110	36.7	100
Sum	300	100	-

3.4. Correlation between Farmers Conception and their professional skills

Results showed, this correlation was significant and positive. Also there was a same correlation between harvested yield and farmer's satisfaction of rapeseed cultivation. Results showed that there was no relationship and correlation between farmer’s literacy/age and their viewpoint to rapeseed cultivation. *Table 4* shows the correlation coefficients among above mentioned variables.

Table 4. Correlation coefficients among different variables

Variables	Conception	
	r	P-Value
Age	-0.054	0.777
Educational Level	-0.31	0.095
Relationship with extension resources	0.72**	0.0001
Satisfaction from rapeseed cultivation	0.46**	0.010
Harvested seed yield	0.92**	0.0001

***. Significant statistically in P≤ 0.01*

4. Conclusion

The results of present study indicate that there is a positive trend toward rapeseed cultivation between farmers who are studied technical leaflets, and active in extensional programs and use the aural and ocular programs. The viewpoint of farmers to a specific and new crop in their planting pattern, has related to their connection with extensional resources and obtainable crop seed yield. They can be satisfy if they sure about solving problems and presence of extension agents. Also there was no relationship and correlation between farmer's literacy/age and their viewpoint to rapeseed cultivation.

References

Abbott, P. C., & Thompson, R. L. (1987). Changing agricultural comparative advantage. *Agricultural Economics* 1(2), 97-112.

Azizi, M. (2006). Study on economic and agronomic aspects of rapeseed cultivation in Khorasan Razavi. Final Report of Research Project. Khorasan Agriculture Organization Pub. 66pp.

Moayedi, A. A., & Azizi, M. (2011). Participatory management opportunity for optimizing in agricultural extension education. *Procedia Social and Behavioral Sciences*, 15, 1531-1534.

Sanders, D. H. (1990). Statistics: A fresh approach. Fourth edition. McGraw-Hill Pub.

Sedighi, H. (2002). Factors affecting on the viewpoint of farmers to developing oilseed rape cultivation in Arak. Agricultural Economic and Development, 52, 133-145.

Tobey, J. A., & Chomo,G. V. (1994). Resource supplies and changing world agricultural comparative advantage. *Agricultural Economics* 10 (3), 207-217.

Yazdani, M. (2007). Technical and economic comparison between wheat and oilseed rape crops in Quchan region, a case study. Msc. Thesis. Azad University of Bodjnord, Iran.